

REMARKS

Reconsideration of the pending application is respectfully requested on the basis of the following particulars:

In the claims

Claims 1 and 4 have been amended to more clearly identify side surfaces of the radiation fins with respect to which the rotational plane of the fan blades is inclined, and to more clearly point out the inclined orientation of the fan and fan blades.

Claims 1 and 4 have each been amended to point out that each of the fins has opposite side surfaces wherein first side surfaces of the radiation fins face in a common direction and are parallel to one another. Support is found in at least Fig. 6 of the present application. Accordingly, no new matter is added.

Claims 1 and 4 are also amended to point out that a rotational axis of said fan is not parallel to the first side surfaces of the radiation fins. This is supported by Figs. 6, 9, and 14, wherein a person skilled in the art would recognize that, given the inclination of the fan blades and hub (schematically shown but not numbered) with respect to the radiation blade surfaces, a rotational axis would be normal (perpendicular) to the rotational plane of the blades (indicated by the blades) and would therefore not be parallel to side surfaces of the radiation fins. Accordingly, no new matter is added.

Rejection of claims 1 and 4 under 35 U.S.C. § 112, second paragraph

Claims 1 and 4 presently stand rejected as being indefinite. In particular, the examiner notes that it is unclear as to which of the two side surfaces that each radiation fin has is defining the inclination of the rotational plane.

Claims 1 and 4 have been amended to more clearly identify side surfaces of the radiation fins with respect to which the rotational plane of the fan blades is inclined.

Claims 1 and 4 state that each of the radiation fins has opposite sides, wherein first side surfaces of the radiation fins face in a common direction.

For example, referring to Fig. 6 of the present application, side surface 221a of each of the fins, against which air flow is directed as indicated by the arrows, is a right-facing side surface. Accordingly, the side surfaces by which the inclination of the rotational plane is defined are side surfaces that face in a common direction, such as all of the right-facing sides.

It is respectfully submitted that the recitation of radiation fins which face in a common direction provides sufficient clarity with respect to the inclination of the rotational plane. Therefore, withdrawal of this rejection is requested.

Rejection of claims 1-5 under 35 U.S.C. § 103(a)

Claims 1, 2, 4, and 5 presently stand rejected as being unpatentable over Chu (U.S. 5,835,347) in view of Fujisaki (GB 2280989). This rejection is respectfully traversed for at least the following reasons.

Claims 1 and 4 have been amended to more clearly define the orientation of the fan, the fan blades, and the radiation fins. The orientation of the fan, and the inclination of the fan and fan blades is clarified by noting that a rotational axis of the fan is not parallel to the side surfaces of the radiation fins.

It is respectfully submitted that neither Chu nor Fujisaki disclose or suggest a cooling fan wherein a fan is connected to a top of a radiator (the radiator being comprised of a plurality of fins), and the fan is oriented such that a rotational plane defined by the fan blades is inclined with respect to side surfaces (planes defined by side surfaces) of the fins and with respect to a plane defined by top edges of the fins.

In Chu, a fan is mounted to a radiator. With reference to Chu's Figs. 3 and 4, it appears that fan blades (not shown) would define a rotational plane that is parallel to a plane defined by top edges of the fins and perpendicular (normal) but not inclined with respect to side surfaces of the fins.

In fact, the examiner states that "Chu fails to teach a frame having a triangular cross section, so that said blades are mounted in said frame such that a rotational plane defined by said blades is inclined relative to planes defined by side surfaces of said

radiation fins, and is inclined relative to a plane defined by top edges of said radiation fins.”

Chu makes no teaching or suggestion whatsoever of any inclination of the fan or fan blades with respect to either side surfaces of the radiation fins or with respect to a plane defined by top edges of the fins.

Fujisaki does not disclose or suggest a fan that is inclined relative to planes defined by side surfaces of radiation fins. On the contrary, in each illustrated instance where a fan is shown mounted relative to a radiator (see *Fujisaki*; Figs. 19 - 26), a rotational plane of the fan is not inclined with respect to planes defined by the side surfaces of the radiation fins. This can be more fully appreciated with respect to a rotational axis of the fan, which one would understand to be perpendicular or normal to the rotational plane of the fan blades.

Referring in particular to Fujisaki's Figs. 20, 21, and 24, it can be seen that a rotational axis of the fan is parallel to the side surfaces of the fins. Accordingly, it is understood that the rotational plane of the fan blades is not inclined with respect to planes defined by the side surfaces. If the rotational plane of the fan blades were inclined with respect to planes defined by the side surfaces, the rotational axis would intersect the planes defined by the side surfaces and not run parallel.

Therefore, even applying the inclined fan of Fujisaki to Chu's fan assembly, the result is not a cooling fan wherein a fan is connected to a top of a radiator, and the fan is oriented such that a rotational plane defined by the fan blades is inclined with respect to side surfaces of the fins **and** with respect to a plane defined by top edges of the fins.

Thus, neither Chu, nor Fujisaki, nor any combination thereof can disclose or suggest each and every element set forth in claims 1 and 4 of the present application, since neither reference discloses or suggests a fan inclined with respect to side surfaces of the radiation fins to direct air flow against the radiation fins as in the present invention. Accordingly, it is respectfully submitted that claims 1-5 are allowable over the cited references, and withdrawal of the rejection is requested.

Claim 3 presently stands rejected as being unpatentable over Chu and Fujisaki in further view of Shen (U.S. 5,495,392). This rejection is respectfully traversed for at least the following reasons.

As noted above, neither Chu nor Fujisaki nor any combination thereof discloses or suggests a fan inclined with respect to side surfaces of the radiation fins to direct air flow against the radiation fins as in the present invention.

Shen does not teach or suggest any inclination of the fan whatsoever. Accordingly, Shen fails to supplement the deficiencies described above with respect to Chu and Fujisaki. Therefore, withdrawal of this rejection is requested.

Conclusion

In view of the amendments to the claims, and in further view of the foregoing remarks, it is respectfully submitted that the application is in condition for allowance. Accordingly, it is requested that claims 1-5 be allowed and the application be passed to issue.

If any issues remain that may be resolved by a telephone or facsimile communication with the Applicant's attorney, the Examiner is invited to contact the undersigned at the numbers shown.

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Respectfully submitted,


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